

## CLAIMS

1. A communication apparatus for use in a communication system that requires establishment of a link to transmit information  
5 between a transmitting side and a receiving side, comprising:

a transmitting section that transmits information data that contains a predetermined amount of information; and

a requesting section that, before termination of a link for information data transmitted currently, requests the  
10 establishment of a link for transmitting next information data.

2. The communication apparatus according to claim 1, wherein said requesting section comprises:

a link establish data generating section that generates link establish data for requesting the establishment of a link;

15 a control section that controls said link establish data generating section to generate the link establish data for establishing a link for the transmission of information data to be sent next; and

a transmitter section that transmits the generated link  
20 establish data immediately after said transmitting section transmits the information data.

3. The communication apparatus according to claim 1, wherein said requesting section comprises:

a link establish data generating section that generates  
25 link establish data for requesting the establishment of a link;

a control section that controls said link establish data generating section to generate the link establish data for

establishing a link for the transmission of information data to be sent next;

a multiplexing section that multiplexes the generated link establish data and the information data to be transmitted  
5 currently by said transmitting section; and

a transmitter section that transmits the multiplexed information data and link establish data.

4. The communication apparatus according to claim 3, wherein said multiplexing section multiplexes the link establish data  
10 and the information data by using at least one of frequency division multiplexing, time division multiplexing, and code division multiplexing.

5. The communication apparatus according to claim 1, wherein said requesting section requests the establishment of a link  
15 by full duplex communication which simultaneously performs transmission and reception.

6. The communication apparatus according to claim 1, wherein said requesting section requests the establishment of a link by bi-directional simultaneous transmission using divisional  
20 multiple access.

7. A communication method for use in a communication system that requires establishment of a link to transmit information between a transmitting side and a receiving side, comprising the steps of:

25 transmitting information data that contains a predetermined amount of information; and

before termination of a link for the transmitted

information data, requesting establishment of a link for transmitting next information data.